

HP Attorney Docket Number 200310068-1, Frederick A. Perner, Filed 01/29/2004

Amendments to the Claims

Cancel claims 1-13

14. (Original) An array of magnetic memory cells comprising:
 - a write current generator for generating a write current for writing to selected memory cells within the array of magnetic memory cells;
 - a first test magnetic memory cell for sensing when a magnitude of the write current is large enough to reliably write to the magnetic memory cells;
 - a second test magnetic memory cell for sensing when the magnitude of the write current is so large that half select errors occur when writing to the magnetic memory cells.
15. (Original) The array of magnetic memory cells of claim 14, wherein the first test magnetic memory cell and the second test magnetic memory cell are substantially larger than the memory cells of the array of magnetic memory cells.
16. (Original) The array of magnetic memory cells of claim 14, wherein if the first test magnetic memory cell does not change magnetic orientations when sensing the write current, the write current is increased.
17. (Original) The array of magnetic memory cells of claim 14, wherein if the second test magnetic memory cell does change magnetic orientations when sensing the write current, the write current is decreased.
18. (Original) A method of selecting a magnetic memory cell write current comprising:
 - sensing the write current with a first test magnetic memory cell;
 - sensing the write current with a second test magnetic memory cell;
 - selecting the write current based upon the sensing of the first test magnetic memory cell and the second test magnetic memory cell.

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19. (Original) The method of claim 18, wherein the first test magnetic memory cell changes magnetic orientation when the write current exceeds a first threshold.
20. (Original) The method of claim 18, wherein the second test magnetic memory cell changes magnetic orientation when the write current exceeds a second threshold.
21. (Original) The method of claim 18, wherein if the first test magnetic memory cell does not change magnetic orientations, then the write current is increased.
22. (Original) The method of claim 18, wherein if the second test magnetic memory cell changes magnetic orientations, then the write current is decreased.
23. (Original) A magnetic memory apparatus comprising:
 - an array of magnetic memory cells;
 - a write current generator for generating write current for writing to the magnetic memory cells;
 - means for sensing the write current with a first test magnetic memory cell;
 - means for sensing the write current with a second test magnetic memory cell;
 - means for selecting the write current based upon responses of the first test magnetic memory cell and the second test magnetic memory cell.
24. (Original) A computing system comprising:
 - a processor interfaced with an array of magnetic memory cells;
 - the array of magnetic memory cells comprising:
 - a write current generator for generating a write current for writing to selected memory cells within the array of magnetic memory cells;

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a first test magnetic memory cell for sensing when a magnitude of the write current is large enough to reliably write to the magnetic memory cells;

a second test magnetic memory cell for sensing when the magnitude of the write current is so large that half select errors occur when writing to the magnetic memory cells.